REMARKS

I. Introduction

The Office Action of August 29, 2008 has been reviewed and the Examiner's comments carefully considered. The present Amendment amends claim 17 in accordance with the specification and drawings as originally filed. No new matter has been added. Claims 1-15, 32-38, and 51 were withdrawn from further consideration in view of an earlier restriction requirement. The Applicants reserve the right to file a divisional application directed to the non-elected claims. Accordingly, claims 17-19, 40-50, and 56-58 are currently under examination in this application, and claim 17 is in independent form.

II. Interview of August 25, 2008

The Applicants would like to thank Examiners Le and Kelly for the courtesies extended to the Applicants' representative during the interview of August 25, 2008. During the interview, the Examiner clarified his positions regarding the new matter rejections. In addition, the Examiner continued to argue that independent claim 17 was obvious in view of the cited prior art. Applicants would like to note that the substance of the interview presented in the Office Action of August 29, 2008 and in the Interview Summary dated August 26, 2008 incorrectly indicates that the undersigned, Kent E. Baldauf, conducted this interview. Ryan J. Miller (Reg. No. 56,236) actually conducted this interview.

III. New Matter and 35 U.S.C. §112, First Paragraph Rejections

In sections II and III of the Office Action, the Examiner has objected to the Amendment filed September 20, 2007 (incorrectly cited in the Office Action as "the Amendment filed 09/24/08") under 35 U.S.C. §132(a) because it introduces new matter and independent claim 17 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. More specifically, the Examiner is contending that that language "wherein a part of the metal oxide (M^HO) is independently present in the carrier core material" added to independent claim 17 has no support in the originally filed specification.

The Applicants would like to note that the language "wherein a part of the metal oxide (M^HO) is independently present in the carrier core material" is taken directly from claim

20 as originally filed. Further support for this language can be found on page 17, lines 6-12, page 19, lines 3-13, page 20, lines 5-7, page 23, lines 16-20, and page 31, lines 13-22 of the originally filed specification. Accordingly, this language is not new matter and the Applicants respectfully request reconsideration and withdrawal of this objection and rejection.

In sections V-VII of the Office Action, the Examiner has objected to the Amendment filed March 10, 2008 under 35 U.S.C. §132(a) because the changes to Tables 1, 2, and 3 constitute new matter. The Examiner has also objected to the Amendment filed March 10, 2008 under 35 U.S.C. §132(a) as introducing new matter and is rejecting independent claim 17 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement because of the addition of the requirement that the carrier core material be a "soft ferrite material".

While the Applicants disagree with the Examiner's reasoning, Tables 1, 2, and 3 have been amended to delete Comparative Example 5, and independent claim 17 has been amended to delete "soft ferrite material". The Applicants believe that these amendments overcome the Examiner's objections and rejection. Reconsideration and withdrawal of these objections are respectfully requested.

IV. Rejections under 35 U.S.C. §103

Claims 17-19, 40-50, and 56-58 stand rejected under 35 U.S.C. §103(a) for obviousness based upon United States Patent Application Publication No. 2003/0122918 to Ikeda et al. (hereinafter "the Ikeda application") in view of United States Patent No. 5,637,431 to Yamane et al. (hereinafter "the Yamane patent"), United States Patent No. 6,316,156 to Takiguchi et al. (hereinafter "the Takiguchi patent"), or United States Patent No. 6,548,218 to Kukimoto et al. (hereinafter "the Kukimoto patent"). In view of the above amendments and the following remarks, the Applicants respectfully request reconsideration of this rejection.

As defined by amended independent claim 17, the present invention is directed to a coated carrier comprising a carrier core material, and a resin coating layer with which the carrier core material is coated. The carrier core material consists essentially of a ferrite component having composition represented by the following formula: $(MO)_y(Fe_2O_3)_z$. In the

formula, y and z are each expressed in % by mol and are numbers satisfying the conditions of $40 \leq z < 100$ and $y+z=100$. M is a metal selected from Fe, Cu, Zn, Mn, Mg, Ni, Sr, Ca and Li. MO is one or more oxides selected from oxides of these metals: at least one metal oxide (M^LO) having a melting point of not higher than 1000°C, and at least one metal oxide (M^HO) having a melting point of not lower than 1800°C. The metal oxide (M^HO) and the metal oxide (M^LO) are contained in the ferrite component. The metal oxide (M^HO) is at least one metal oxide selected from the group consisting of ZrO_2, TiO_2 and Ta_2O_5. The metal oxide (M^LO) is at least one metal oxide selected from the group consisting of Bi_2O_3 and P_2O_5. A part of the metal oxide (M^HO) is independently present in the carrier core material for forming the coated carrier. A coercive force (Hc) of the carrier core material is not more than 50 Oe and the carrier core material has an average particle diameter of 15 to 70 μm.

The amendments to independent claim 17 reflected in the above Listing of Claims make it clear that the carrier core material consists essentially of the ferrite component, at least one metal oxide (M^HO), and at least one metal oxide (M^LO). Accordingly, the carrier core material of the present invention substantially does not contain a binder resin. Therefore, the ferrite component, metal oxide (M^HO), and metal oxide (M^LO) are **not** dispersed in a binder resin. Rather, in the present invention, metal oxide (M^HO) and metal oxide (M^LO) are contained in the ferrite component and at least a part of the metal oxide (M^HO) is independently present in the ferrite component for constituting the carrier core material.

On the other hand, the Ikeda application is directed to a magnetic-fine-particle-dispersed resin carrier comprising a carrier core and a resin coating layer with which the carrier core is coated. The carrier core comprises a magnetic metallic compound (*e.g.*, ferrite) particles, a non-magnetic metallic compound (*e.g.*, TiO_2, ZrO_2) particles, and a binder resin.

Initially, the Applicants would like to note that the Ikeda application does not teach or suggest that the M^LO (Bi_2O_3 and P_2O_5) is contained in the carrier core as required by amended independent claim 17.

In addition, in the magnetic-fine-particle-dispersed resin carrier of the Ikeda application, the magnetic metallic compound particles (ferrite) and the non-magnetic metallic compound particles (TiO_2, ZrO_2) are dispersed in the binder resin. Accordingly, the Ikeda application does not teach or suggest that the non-magnetic metallic compound (TiO_2, ZrO_2) is

contained in the magnetic metallic compound (ferrite) and at least part of the non-magnetic compound (TiO_2 or ZrO_2) is independently dispersed inside the ferrite particle as required by amended independent claim 17.

Furthermore, the magnetic metallic compound (*e.g.*, ferrite) particles of the Ikeda application are fine particles having a number-average particle diameter of from 0.02 μm to 2 μm. This provides an indication that the carrier of the Ikeda application has a volume-based 50% particle diameter (D50) of from 15 μm to 45 μm (*see* paragraph [0052] of the Ikeda application). On the other hand, the carrier core material of independent claim 17 has an average particle diameter of 15 to 70 μm. Accordingly, the ferrite component of the present invention also has an average particle diameter of 15 to 70 μm because the carrier core material of the present invention is made mainly of the ferrite component and the ferrite component is not fine particles dispersed in the carrier core. Therefore, the magnetic metallic compound (*e.g.*, ferrite) particle of the Ikeda application is very different from the ferrite component and the carrier core material of independent claim 17 in the particle size.

The Yamane patent, the Takiguchi patent, and the Kukimoto patent each disclose magnetic particles and are provided by the Examiner as allegedly teaching the use of Bi_2O_3 in a carrier for controlling electrical resistance. These references do not cure the deficiencies of the Ikeda application discussed hereinabove. More specifically, these references do not teach or suggest that at least a part of the M^HO is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 μm.

For the foregoing reasons, the Applicants believe that the subject matter of amended independent claim 17 is not rendered obvious by the Ikeda application in view of the Yamane patent, the Takiguchi patent, and the Kukimoto patent. Reconsideration of the rejection of claim 17 is respectfully requested.

Claims 18, 19, 40-50, and 56-58 depend from and add further limitations to amended independent claim 17 and are believed to be patentable for the reasons discussed hereinabove in connection with amended independent claim 17. Reconsideration of the rejection of claims 18, 19, 40-50, and 56-58 is respectfully requested.

Claims 17-19, 40-50, and 56-58 stand rejected under 35 U.S.C. §103(a) for obviousness based upon United States Patent No. 6,165,663 to Baba et al. (hereinafter "the Baba patent") in view of the Yamane patent, the Takiguchi patent, or the Kukimoto patent. In view of the above amendments and the following remarks, the Applicants respectfully request reconsideration of this rejection.

As discussed hereinabove in greater detail, the present invention is directed to a coated carrier comprising a carrier core material and a resin coating layer as defined by amended independent claim 17.

The Baba patent is directed to a magnetic coated carrier suitable for constituting a two-component type developer for use in electrophotography. The coated carrier is composed of magnetic coated carrier particles comprising magnetic carrier core particles each having a binder resin, metal oxide particles, and a coating layer surface-coating each carrier core particle. The metal oxide particles have been subjected to a surface lipophilicity-imparting treatment.

The magnetic coated carrier disclosed in the Baba patent is similar to the magnetic-fine-particle-dispersed resin carrier disclosed in the Ikeda application discussed hereinabove. In other words, the Baba patent discloses a magnetic coated carrier having a carrier core and a resin coating layer with which the carrier core is coated. The carrier core comprises magnetic metal oxide (*e.g.*, ferrite) particles, non-magnetic metal oxide (*e.g.*, TiO_2, ZrO_2) particles, and a binder resin. The magnetic metal oxide particles and the non-magnetic metal oxide particles are dispersed in the binder resin. The magnetic metal oxide particles have a number-average particle diameter of from 0.02 μm to 2 μm and the non-magnetic metal oxide particles have a number-average particle diameter of from 0.05 μm to 5 μm (*see* column 6, lines 36-53 and column 7, lines 5-16 and 29 of the Baba patent).

Accordingly, the Baba patent does not teach or suggest that at least a part of the M^HO is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 μm. Furthermore, the magnetic metal oxide particles and the non-magnetic metal oxide particles of the Baba patent are required to be dispersed in a binder resin.

The Yamane patent, the Takiguchi patent, and the Kukimoto patent each disclose magnetic particles and are provided by the Examiner as allegedly teaching the use of Bi_2O_3 in a carrier for controlling electrical resistance. These references do not cure the deficiencies of the Ikeda application discussed hereinabove. More specifically, these references do not teach or suggest that at least a part of the M^HO is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 μm.

For the foregoing reasons, the Applicants believe that the subject matter of amended independent claim 17 is not rendered obvious by the Baba patent in view of the Yamane patent, the Takiguchi patent, and the Kukimoto patent. Reconsideration of the rejection of claim 17 is respectfully requested.

Claims 18, 19, 40-50, and 56-58 depend from and add further limitations to amended independent claim 17 and are believed to be patentable for the reasons discussed hereinabove in connection with amended independent claim 17. Reconsideration of the rejection of claims 18, 19, 40-50 and 56-58 is respectfully requested.

V. Conclusion

Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of pending claims 17-19, 40-50, and 56-58 are respectfully requested.

Respectfully submitted,

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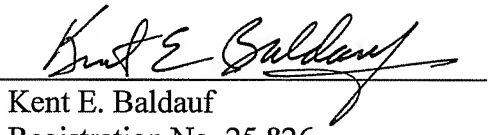
By 

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